

Amendment

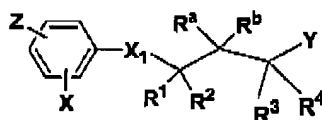
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USSN 09/848,697  
QA211NPAmendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A compound of the formula



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wherein  $X_1$  is O,  $S(O)_n$ ,  $\text{---}\overset{\text{R}^5}{\text{N}}\text{---}$ ,  $\text{CO}\text{---}\overset{\text{R}^6}{\text{N}}\text{---}$ , or  $\text{---CH}_2\text{---}$ , with the proviso that when  $X_1$  is  $\text{---CH}_2\text{---}$ ,  $R^1$  and  $R^2$  are only halogen;

$n$  is 0, 1 or 2;

$R^a$  and  $R^b$  when taken together form an oxo ( $=O$ ) group, or  $R^a$  and  $R^b$  are each independently hydrogen, OH,  $\text{OCOR}^9$ ,  $\text{NH}_2$ ,  $\text{N}_3$ ,  $\text{NHCOOR}^9$ ,  $\text{NHCOCOR}^9$ ,  $\text{NHSO}_2\text{R}^9$  or F;

$X$  is H,  $\text{CF}_3$ ,  $\text{OCF}_3$ , halogen,  $\text{C}_1\text{--C}_7$  alkyl,  $\text{C}_2\text{--C}_7$  alkenyl,  $\text{C}_2\text{--C}_7$  alkynyl or  $\text{C}_3\text{--C}_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by  $\text{COOR}^8$ , CN,  $\text{C(O)NR}^6\text{R}^7$ ,  $\text{PO}_3\text{R}^8$ ,  $\text{SO}_3\text{R}^8$ , heterocyclic,  $\text{OR}^8$ , SH,  $\text{S(O)}_n\text{R}^9$ ,  $\text{NR}^6\text{R}^7$ ,  $\text{NH(CO)NR}^6\text{R}^7$ ,  $\text{NH(CO)OR}^9$ , or aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from  $\text{NR}^6\text{R}^7$ ,  $\text{OR}^8$ ,  $\text{COOR}^8$ ,  $\text{SO}_3\text{R}^8$ ,  $\text{OCOR}^9$ ,  $\text{PO}_3\text{R}^8$ , and  $\text{C(O)NR}^6\text{R}^7$  and heterocyclic;

$R^1$  and  $R^2$  are each independently H, halogen,  $\text{OR}^9$ ,  $\text{C}_1\text{--C}_7$  alkyl,  $\text{C}_2\text{--C}_7$  alkynyl,

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C<sub>2</sub>-C<sub>7</sub> alkenyl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>, NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, OC(O)OR<sup>9</sup>, or aryl or heteroaryl, said aryl and heteroaryl being optionally substituted with one or two groups independently selected from NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>9</sup>, PO<sub>3</sub>R<sup>8</sup>, and C(O)NR<sup>6</sup>R<sup>7</sup> and heterocyclic;

R<sup>3</sup>, R<sup>4</sup> and Y are each independently H, halogen, OR<sup>10</sup>, S(O)<sub>n</sub>R<sup>10</sup>, C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>, NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, OC(O)OR<sup>9</sup>, or aryl or heteroaryl, said aryl and heteroaryl being optionally substituted by one or two groups independently selected from NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>9</sup>, PO<sub>3</sub>R<sup>8</sup>, and C(O)NR<sup>6</sup>R<sup>7</sup> and heterocyclic, with the proviso that not all of R<sup>3</sup>, R<sup>4</sup> and Y may be the same halogen;

R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently H, C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, OR<sup>8</sup>, NR<sup>8</sup>R<sup>9</sup>, SO<sub>3</sub>R<sup>8</sup>, PO<sub>3</sub>R<sup>8</sup>, halogen, or aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, and PO<sub>3</sub>R<sup>8</sup> and heterocyclic;

R<sup>8</sup> is H, C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl or cycloalkyl;

R<sup>9</sup> is C<sub>1</sub>-C<sub>7</sub> saturated straight chain alkyl or cycloalkyl;

R<sup>10</sup> is C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl, aryl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by

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COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>,  
NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, or aryl or heteroaryl, said aryl or heteroaryl  
being optionally substituted by one or two groups independently selected from  
NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>8</sup>, PO<sub>3</sub>R<sup>8</sup>, and C(O)NR<sup>6</sup>R<sup>7</sup> and heterocyclic;

Z is OR<sup>11</sup>, S(O)<sub>n</sub>R<sup>11</sup>, NR<sup>11</sup>R<sup>12</sup> or CHR<sup>11</sup>R<sup>12</sup>;

R<sup>11</sup> is C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl, said alkyl,  
alkenyl, alkynyl or cycloalkyl group being substituted by NR<sup>13</sup>R<sup>14</sup>, S(O)<sub>n</sub>R<sup>13</sup>, or  
OR<sup>13</sup>;

R<sup>12</sup> is hydrogen, C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl,  
said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by  
NR<sup>13</sup>R<sup>14</sup>, S(O)<sub>n</sub>R<sup>13</sup>, or OR<sup>13</sup>;

R<sup>13</sup> is SiR<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl, aryl or C<sub>3</sub>-C<sub>7</sub>  
cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being substituted by  
one to three groups independently selected from COOR<sup>8</sup>, OR<sup>8</sup>, SiR<sup>15</sup>R<sup>16</sup>R<sup>17</sup>,  
OR<sup>15</sup>, aryl, and biaryl and heteroaryl, said aryl[[.]] and biaryl and heteroaryl being  
optionally substituted with one to three groups independently selected from halogen,  
CF<sub>3</sub>, OR<sup>8</sup>, COOR<sup>8</sup>, NO<sub>2</sub>, and CN;

R<sup>14</sup> is H, SiR<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl, aryl or C<sub>3</sub>-  
C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally  
substituted by one to three groups independently selected from COOR<sup>8</sup>, OR<sup>8</sup>, Si  
R<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, OR<sup>15</sup>, aryl, and biaryl and heteroaryl, said aryl[[.]] and biaryl and  
heteroaryl being optionally substituted with one to three groups independently  
selected from halogen, CF<sub>3</sub>, OR<sup>8</sup>, COOR<sup>8</sup>, NO<sub>2</sub>, and CN; and or

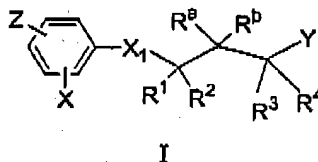
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~~R<sup>13</sup> and R<sup>14</sup> when taken together with the nitrogen atom to which they are attached may form a 5-7 membered heterocyclic ring with one or more heteroatoms selected from O, N and S; said ring being optionally substituted by OR<sup>8</sup>, COOR<sup>8</sup>, or C(O)NR<sup>5</sup>R<sup>6</sup>; and~~

~~R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> are each independently is C<sub>1</sub>-C<sub>7</sub> alkyl, aryl, benzyl, benzhydryl, biaryl, heteroaryl, or (C<sub>1</sub>-C<sub>6</sub>) alkyl-aryl or (C<sub>1</sub>-C<sub>6</sub>) alkyl-heteroaryl; said aryl, benzyl, benzhydryl, and biaryl being optionally substituted by halogen, CF<sub>3</sub>, OR<sup>8</sup>, COOR<sup>8</sup>, NO<sub>2</sub>, CN, or C<sub>1</sub>-C<sub>7</sub> alkyl.~~

Claim 2. (Currently Amended) A compound of the formula



or a pharmaceutically acceptable salt thereof wherein

X<sub>1</sub> is O, S(O)<sub>n</sub>,  $\text{--}\overset{\text{R}^5}{\text{N}}\text{--}$ ,  $\text{CO--}\overset{\text{R}^6}{\text{N}}\text{--}$  or  $\text{--CH}_2\text{--}$ , with the proviso that when X<sub>1</sub> is  $\text{--CH}_2\text{--}$ , R<sup>1</sup> and R<sup>2</sup> are only halogen;

n is 0, 1 or 2;

R<sup>a</sup> and R<sup>b</sup> when taken together form an oxo (=O) group, or R<sup>a</sup> and R<sup>b</sup> are each independently hydrogen, OH, OCOR<sup>9</sup>, NH<sub>2</sub>, N<sub>3</sub>, NHCOOR<sup>9</sup>, NHCOCOR<sup>9</sup>, NHSO<sub>2</sub>R<sup>9</sup> or F;

X is H, CF<sub>3</sub>, OCF<sub>3</sub>, halogen, C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH,

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$S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ , ~~or aryl or heteroaryl~~, said aryl or ~~heteroaryl~~ being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^9$ ,  $PO_3R^8$ , and  $C(O)NR^6R^7$  and ~~heterocyclic~~;

$R^1$  and  $R^2$  are each independently H, halogen,  $OR^9$ ,  $C_1-C_7$  alkyl,  $C_2-C_7$  alkynyl,  $C_2-C_7$  alkenyl or  $C_3-C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , ~~heterocyclic~~,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , ~~or aryl or heteroaryl~~, said aryl and ~~heteroaryl~~ being optionally substituted with one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^9$ ,  $PO_3R^8$ , and  $C(O)NR^6R^7$  and ~~heterocyclic~~;

$R^3$ ,  $R^4$  and Y are each independently H,  $OR^{10}$ ,  $S(O)_nR^{10}$ ,  $C_1-C_7$  alkyl,  $C_2-C_7$  alkenyl,  $C_2-C_7$  alkynyl or  $C_3-C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , ~~heterocyclic~~,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , ~~or aryl or heteroaryl~~, said aryl and ~~heteroaryl~~ being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ , and  $C(O)NR^6R^7$  and ~~heterocyclic~~;

$R^5$ ,  $R^6$  and  $R^7$  are each independently H,  $C_1-C_7$  alkyl,  $C_2-C_7$  alkenyl,  $C_2-C_7$  alkynyl or  $C_3-C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $OR^8$ ,  $NR^8R^9$ ,  $SO_3R^8$ ,  $PO_3R^8$ , halogen, or ~~or aryl or heteroaryl~~, said aryl and ~~heteroaryl~~ being optionally substituted by one or two groups independently selected from  $COOR^8$ ,  $SO_3R^8$ , and  $PO_3R^8$  and ~~heterocyclic~~;

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$R^8$  is H,  $C_1$ - $C_7$  saturated straight chain alkyl or cycloalkyl,  $CF_3$  or  $CH_2CF_3$ ;

$R^9$  is  $C_1$ - $C_7$  saturated straight chain alkyl or cycloalkyl;

$R^{10}$  is  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl, aryl or  $C_3$ - $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , ~~heterocyclic~~,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ , or aryl or ~~heteroaryl~~, said aryl or ~~heteroaryl~~ being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ , and  $C(O)NR^6R^7$  and ~~heterocyclic~~;

Z is  $OR^{11}$ ,  $S(O)_nR^{11}$ ,  $NR^{11}R^{12}$  or  $CHR^{11}R^{12}$ ;

$R^{11}$  is  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl or  $C_3$ - $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being substituted by  $NR^{13}R^{14}$ ,  $S(O)_nR^{13}$ , or  $OR^{13}$ ;

$R^{12}$  is hydrogen,  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl or  $C_3$ - $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by  $NR^{13}R^{14}$ ,  $S(O)_nR^{13}$  or  $OR^{13}$ ;

$R^{13}$  is  ~~$SiR^{15}R^{16}R^{17}$~~ ,  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl, aryl or  $C_3$ - $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being substituted by one to three groups independently selected from  $COOR^8$ ,  $OR^8$ ,  ~~$SiR^{15}R^{16}R^{17}$~~ ,  $OR^{15}$ , aryl, and biaryl and ~~heteroaryl~~, said aryl[[.]] and biaryl and ~~heteroaryl~~ being optionally substituted with one to three groups independently selected from halogen,  $CF_3$ ,  $OR^8$ ,  $COOR^8$ ,  $NO_2$ , and CN;

$R^{14}$  is H,  ~~$SiR^{15}R^{16}R^{17}$~~ ,  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl, aryl or  $C_3$ -

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C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by one to three groups independently selected from COOR<sup>8</sup>, OR<sup>8</sup>, SiR<sup>15</sup>R<sup>16</sup>R<sup>17</sup>, OR<sup>15</sup>, aryl, and biaryl and heteroaryl, said aryl[,] and biaryl and heteroaryl being optionally substituted with one to three groups independently selected from halogen, CF<sub>3</sub>, OR<sup>8</sup>, COOR<sup>8</sup>, NO<sub>2</sub>, and CN; and or

~~R<sup>13</sup> and R<sup>14</sup> when taken together with the nitrogen atom to which they are attached may form a 5-7 membered heterocyclic ring with one or more heteroatoms selected from O, N and S; said ring being optionally substituted by OR<sup>8</sup>, COOR<sup>8</sup>, or C(O)NR<sup>5</sup>R<sup>6</sup>; and~~

~~R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> are each independently is C<sub>1</sub>-C<sub>7</sub> alkyl, aryl, benzyl, benzhydryl, biaryl, heteroaryl, or (C<sub>1</sub>-C<sub>6</sub>) alkyl-aryl or (C<sub>1</sub>-C<sub>6</sub>) alkyl-heteroaryl, said aryl, benzyl, benzhydryl, and biaryl being optionally substituted by halogen, CF<sub>3</sub>, OR<sup>8</sup>, COOR<sup>8</sup>, NO<sub>2</sub>, CN, or C<sub>1</sub>-C<sub>7</sub> alkyl.~~

Claim 3. (Currently Amended) A compound of claim 2 wherein X<sub>1</sub> is O or S(O)<sub>n</sub> and Y is OR<sup>10</sup> in which R<sup>10</sup> is C<sub>1</sub>-C<sub>7</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkenyl, C<sub>2</sub>-C<sub>7</sub> alkynyl, aryl or C<sub>3</sub>-C<sub>7</sub> cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by COOR<sup>8</sup>, CN, C(O)NR<sup>6</sup>R<sup>7</sup>, PO<sub>3</sub>R<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, heterocyclic, OR<sup>8</sup>, SH, S(O)<sub>n</sub>R<sup>9</sup>, NR<sup>6</sup>R<sup>7</sup>, NH(CO)NR<sup>6</sup>R<sup>7</sup>, NH(CO)OR<sup>9</sup>, or aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from NR<sup>6</sup>R<sup>7</sup>, OR<sup>8</sup>, COOR<sup>8</sup>, SO<sub>3</sub>R<sup>8</sup>, OCOR<sup>9</sup>, PO<sub>3</sub>R<sup>8</sup>, and C(O)NR<sup>6</sup>R<sup>7</sup> or heterocyclic, said R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> substituents being defined as in claim 2.

Claim 4. (Original) A compound of claim 3 in which R<sup>a</sup> and R<sup>b</sup> taken together represent an oxo (=O) group, or R<sup>a</sup> and R<sup>b</sup> are each independently hydrogen or OH.

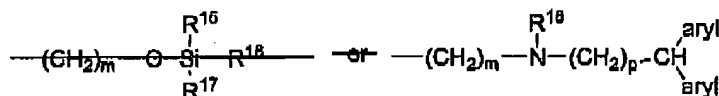
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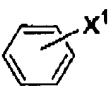
Claims 5-6. (Canceled).

Claim 7. (Currently Amended) A compound of claim 3 in which

Z is



in which m and p each independently represent an integer of one to six,  $\text{R}^{15}$ ,  $\text{R}^{16}$ ,  $\text{R}^{17}$  are each independently  $\text{C}_1$ - $\text{C}_7$  alkyl or phenyl,  $\text{R}^{18}$  is  $\text{C}_1$ - $\text{C}_7$  alkyl and aryl

represents  in which  $\text{X}^1$  is halogen.

Claim 8. (Canceled).

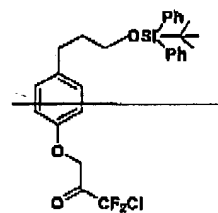
Claim 9. (Original) A pharmaceutical composition for the inhibition of cytosolic phospholipase  $\text{A}_2$  comprising a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

Claim 10. (Withdrawn) A method of inhibiting cytosolic phospholipase  $\text{A}_2$  in a mammal in need thereof, comprising administering to said mammal a therapeutically effective amount of a compound of claim 1.

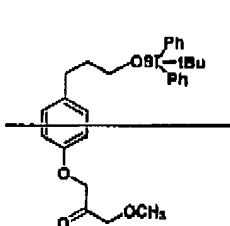
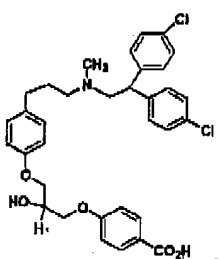
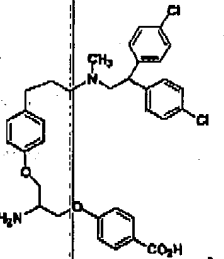
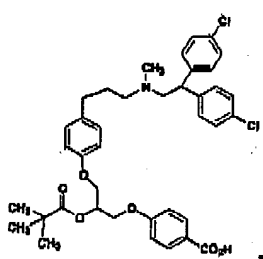
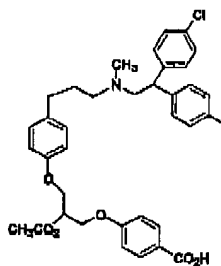
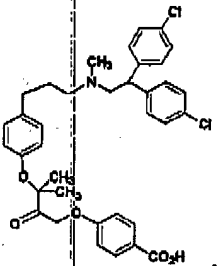
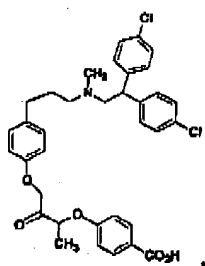
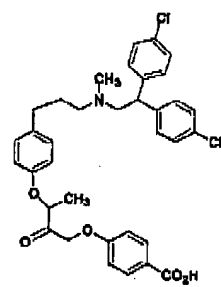
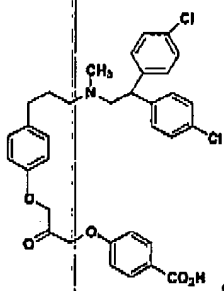
Claim 11. (Currently Amended) A compound selected from



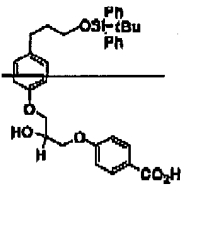
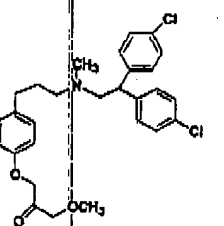
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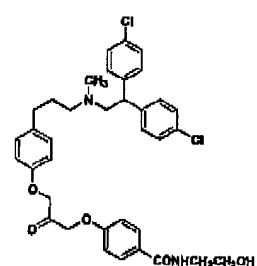
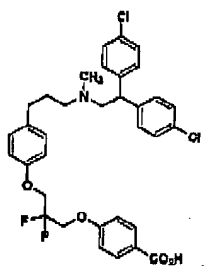
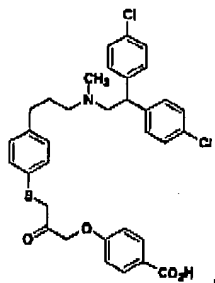
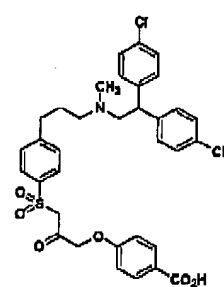
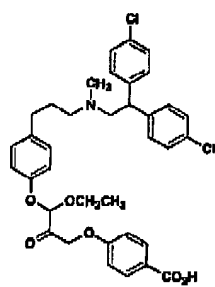
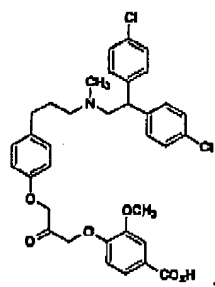
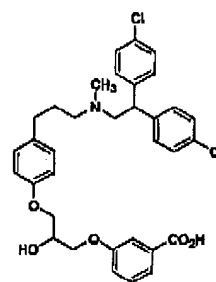
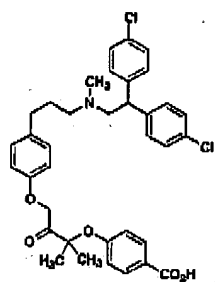
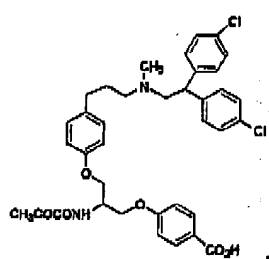
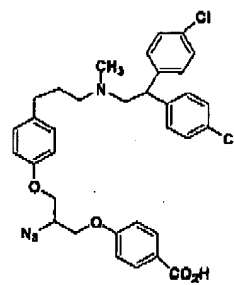
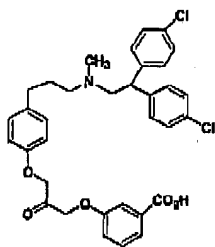
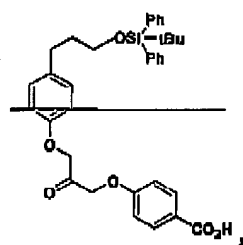


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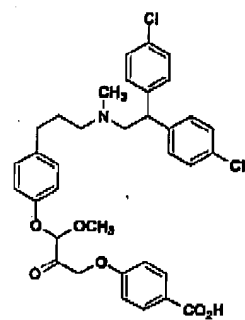
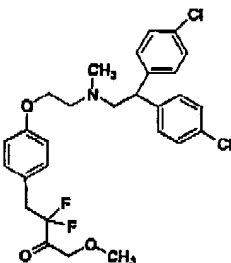
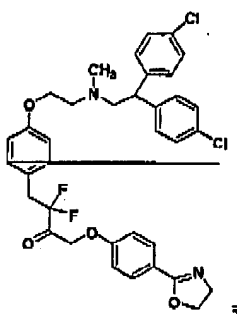
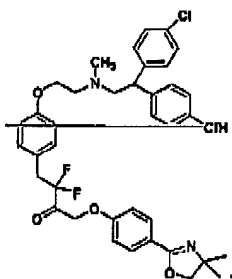
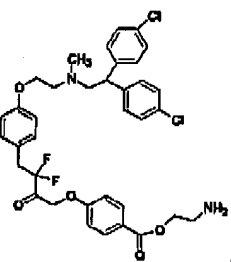
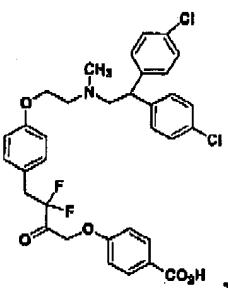
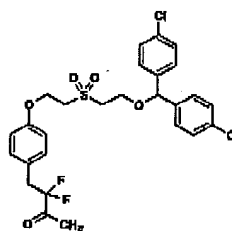
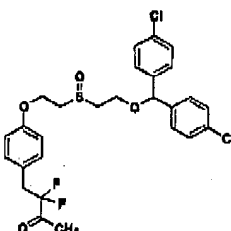
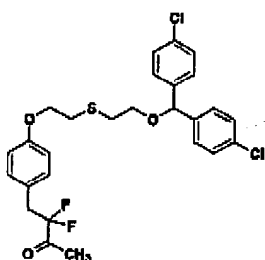
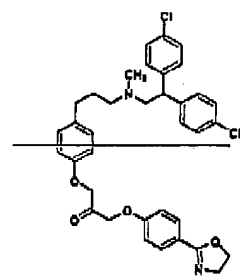
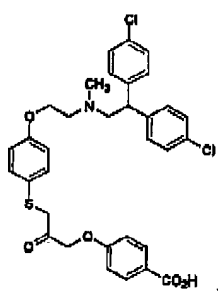
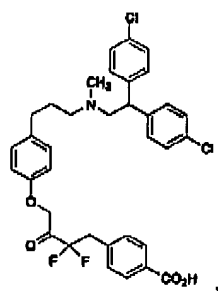
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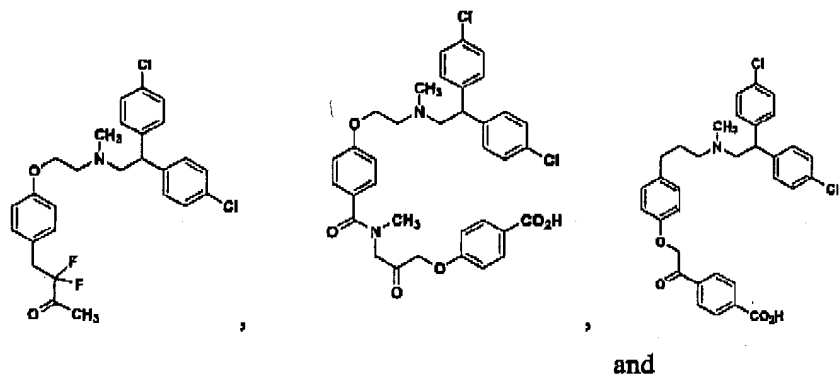
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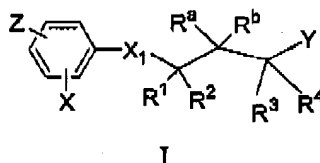
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or a pharmaceutically acceptable salt thereof.

**Claim 12. (Currently Amended) A compound of the formula**



or a pharmaceutically acceptable salt thereof wherein

$X_1$  is O, S(O)<sub>n</sub>,  $\text{CO}-\overset{\text{R}^5}{\underset{|}{\text{N}}}-$ , or  $-\text{CH}_2-$ , with the proviso that when  $X_1$  is  $-\text{CH}_2-$ ,  $\text{R}^1$  and  $\text{R}^2$  are only halogen;

**n is 0, 1 or 2;**

R<sup>a</sup> and R<sup>b</sup> when taken together form an oxo (=O) group, or R<sup>a</sup> and R<sup>b</sup> are each independently hydrogen, OH, OCOR<sup>9</sup>, NH<sub>2</sub>, N<sub>3</sub>, NHCOCOR<sup>9</sup>, or F;

**X is H;**

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$R^1$  and  $R^2$  are each independently H, halogen,  $OR^9$ , or  $C_1-C_7$  alkyl;

$R^3$ ,  $R^4$  and Y are each independently H, halogen,  $OR^{10}$ , or  $C_1-C_7$  alkyl, said alkyl being optionally substituted by aryl, said aryl being optionally substituted by one or two  $COOR^8$  groups, with the proviso that not all of  $R^3$ ,  $R^4$  and Y may be the same halogen;

$R^5$ ,  $R^6$ , and  $R^7$  are each independently hydrogen or  $C_1-C_7$  alkyl, said alkyl being optionally substituted by  $OR^8$ ;

$R^8$  is H or  $C_1-C_7$  saturated straight chain alkyl;

$R^9$  is  $C_1-C_7$  saturated straight chain alkyl;

$R^{10}$  is  $C_1-C_7$  alkyl or aryl, said alkyl or aryl group being optionally substituted by  $COOR^8$ ,  $C(O)NR^6R^7$ , heterocyclic, or  $OR^8$ ;

Z is  $OR^{11}$  or  $CHR^{11}R^{12}$ ;

$R^{11}$  is  $C_1-C_7$  alkyl substituted by  $NR^{13}R^{14}$ ,  $S(O)_nR^{13}$ , or  $OR^{13}$ ;

$R^{12}$  is hydrogen;

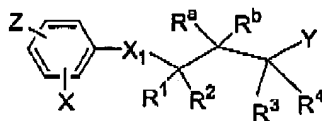
$R^{13}$  is  ~~$SiR^{15}R^{16}R^{17}$~~  or  $C_1-C_7$  alkyl, said alkyl substituted by one to three groups independently selected from  $OR^{15}$  and aryl, said aryl substituted with one halogen;

$R^{14}$  is  $C_1-C_7$  alkyl; and

~~$R^{15}$ ,  $R^{16}$ , and  $R^{17}$~~  are each independently is  $C_1-C_7$  alkyl, aryl, or benzhydryl, said aryl and benzhydryl being optionally substituted by halogen.

Claim 13. (Currently Amended) A compound of the formula

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or a pharmaceutically acceptable salt thereof wherein

$X_1$  is O,  $S(O)_n$ , or  $-CH_2-$ , with the proviso that when  $X_1$  is  $-CH_2-$ ,  $R^1$  and  $R^2$  are only halogen;

$n$  is 0, 1 or 2;

$R^a$  and  $R^b$  are each independently hydrogen, OH,  $OCOR^9$ ,  $NH_2$ ,  $N_3$ ,  $NHCOOR^9$ ,  $NHCOCOR^9$ , or F;

$X$  is H,  $CF_3$ ,  $OCF_3$ , halogen,  $C_1-C_7$  alkyl,  $C_2-C_7$  alkenyl,  $C_2-C_7$  alkynyl or  $C_3-C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl or cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ , or aryl or heteroaryl, said aryl or heteroaryl being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^9$ ,  $PO_3R^8$ , and  $C(O)NR^6R^7$  and heterocyclic;

$R^1$  and  $R^2$  are each independently H, halogen,  $OR^9$ ,  $C_1-C_7$  alkyl,  $C_2-C_7$  alkynyl,  $C_2-C_7$  alkenyl or  $C_3-C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , heterocyclic,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , or aryl or heteroaryl, said aryl and heteroaryl being optionally substituted with one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^9$ ,  $PO_3R^8$ , and  $C(O)NR^6R^7$  and heterocyclic;

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$R^3$  and  $R^4$  are each independently H, halogen,  $OR^{10}$ ,  $S(O)_nR^{10}$ ,  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl or  $C_3$ - $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , ~~heterocyclic~~,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ ,  $OC(O)OR^9$ , ~~or aryl or heteroaryl~~, said aryl and heteroaryl being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ , and  $C(O)NR^6R^7$  and ~~heterocyclic~~, with the proviso that not all of  $R^3$ ,  $R^4$  and Y may be the same halogen;

Y is  $OR^{10}$  or  $S(O)_nR^{10}$ ;

$R^5$ ,  $R^6$  and  $R^7$  are each independently H,  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl or  $C_3$ - $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl and cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $OR^8$ ,  $NR^8R^9$ ,  $SO_3R^8$ ,  $PO_3R^8$ , halogen, or aryl ~~or heteroaryl~~, said aryl ~~or heteroaryl~~ being optionally substituted by one or two groups independently selected from  $COOR^8$ ,  $SO_3R^8$ , and  $PO_3R^8$  and ~~heterocyclic~~;

$R^8$  is H,  $C_1$ - $C_7$  saturated straight chain alkyl or cycloalkyl;

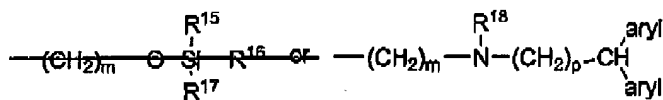
$R^9$  is  $C_1$ - $C_7$  saturated straight chain alkyl or cycloalkyl;

$R^{10}$  is  $C_1$ - $C_7$  alkyl,  $C_2$ - $C_7$  alkenyl,  $C_2$ - $C_7$  alkynyl, aryl or  $C_3$ - $C_7$  cycloalkyl, said alkyl, alkenyl, alkynyl, aryl or cycloalkyl group being optionally substituted by  $COOR^8$ , CN,  $C(O)NR^6R^7$ ,  $PO_3R^8$ ,  $SO_3R^8$ , ~~heterocyclic~~,  $OR^8$ , SH,  $S(O)_nR^9$ ,  $NR^6R^7$ ,  $NH(CO)NR^6R^7$ ,  $NH(CO)OR^9$ , or aryl ~~or heteroaryl~~, said aryl ~~or heteroaryl~~ being optionally substituted by one or two groups independently selected from  $NR^6R^7$ ,  $OR^8$ ,  $COOR^8$ ,  $SO_3R^8$ ,  $OCOR^8$ ,  $PO_3R^8$ , and  $C(O)NR^6R^7$  ~~or heterocyclic~~;  
and


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Z is



in which m and p each independently represent an integer of one to six, ~~R<sup>15</sup>, R<sup>16</sup>,~~  
~~R<sup>17</sup>~~ are each independently C<sub>1</sub>-C<sub>7</sub> alkyl or phenyl, R<sup>18</sup> is C<sub>1</sub>-C<sub>7</sub> alkyl and aryl

represents  in which X<sup>1</sup> is halogen.



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